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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,071	07/09/2003	Toshiaki Irie	04995.105001	9945

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EXAMINER
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MARESCA, JOSEPH ANDREW

ART UNIT	PAPER NUMBER
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2675

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/616,071

Applicant(s)

IRIE, TOSHIAKI

Examiner

Joseph Maresca

Art Unit

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2675

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Oath/Declaration***

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:  
The specification to which the oath or declaration is directed has not been adequately identified.  
See MPEP § 602.

### ***Drawings***

3. Figures 4 and 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Control System for a Display Device Incorporated in a Combined Electrical System.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2675

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saegusa (Japanese Published App. 05-265389) in view of Masaki (Japanese Published App. 08-088838) and further in view of Shimizu (US Patent No. 5,801,674).

With respect claim 2, Saegusa teaches a multiple control system (Abstract) for controlling a display unit (8) provided in a composite electronic apparatus (Abstract) having a plurality of electronic devices incorporated therein (paragraph 2). Saegusa further teaches a first controller (3) adapted to control one of the electronic devices (paragraph 14) and having an output selection terminal (paragraph 21, see drawing 1) and an output terminal (Ps1-n) connected to the display (8).

Saegusa further teaches a second controller (4) adapted to control another electronic device (paragraph 14) and having an output selection terminal (paragraph 24) connected to the output selection terminal of the first controller (3, see drawing 1) and an output terminal (Ps1-n) connected to the display (8) in parallel with the first controller (3, see drawing 1).

Saegusa does not expressly teach a display driver adapted to drive the display unit or the output terminal of the first controller and the second controller being a three-state output. Saegusa also does not expressly teach when the first controller controls the display driver, the first controller output a first control signal to the second controller, and the second controller puts the three-state output terminal thereof in a high impedance state when the first control signal is received and that when the first controller does not control the display driver, the first controller outputs a second control signal to the second controller and puts the three-state output terminal thereof in a high impedance state, and the second controller controls the display driver when the second control signal is received.

Saegusa also teaches a device (7, input actuation section) designed to transmit the control signals to the two microprocessors based on the input of the user (paragraph 24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the functionality of the input actuation section (7) with the first microprocessor so the output

Art Unit: 2675

selection signals would be transmitted from it instead of a separate device since it has been held that making integral that which is separate does not in itself make an invention patentable (In re Lockhart, 90 USPQ 214).

In the same field of endeavor (transmitting display data), Masaki teaches the use of a three-state output terminals (11-13) for use where three video signals feed the same output (14, memory). Masaki further teaches that when the first device (8) is outputting the video signal the second (9) and third (10) devices are both driving their three-state outputs at a high impedance state and when the second (9) or third (10) devices are driving their outputs, the other two devices are outputting in the high impedance state (paragraphs 21-24).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to combine the multiple control system of Saegusa in parallel with the tri-state output method for video signals used in Masaki in order allow the devices to be attached to a common device without the need for extra hardware (in this case eliminating the need for diodes) thereby reducing the construction size of the device (Masaki, paragraph 75).

Neither Saegusa nor Masaki expressly teach a display driver adapted to drive the display unit or that the output terminal is connected via a serial communication line.

In the same field of endeavor (transmitting display data), Shimizu teaches a display driver (3) adapted to drive the display unit (1, LCD Panel).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to combine the device multiple control device using tri-state outputs as described above using Saegusa and Masaki with the display driver and serial driving method of Shimizu in order to provide a driving device which can be operated at a high speed (Shimizu, column 2 lines 5-10).

With respect to claim 1, Saegusa teaches a multiple control system (Abstract) for controlling a display unit (8) provided in a composite electronic apparatus (Abstract) having a plurality of electronic devices incorporated therein (paragraph 2). Saegusa further teaches a first controller (3) adapted to control one of the electronic devices (paragraph 14) and having an output selection terminal (paragraph 21, see drawing 1) and an output terminal (Ps1-n) connected to the display (8).

Saegusa further teaches a second controller (4) adapted to control another electronic device (paragraph 14) and having an output selection terminal (paragraph 24) connected to the output selection terminal of the first controller (3, see drawing 1) and an output terminal (Ps1-n) connected to the display (8) in parallel with the first controller (3, see drawing 1).

Saegusa does not expressly teach a display driver adapted to drive the display unit, the output terminal of the first controller and the second controller being a three-state output, or that the output terminal is connected via a serial communication line. Saegusa also does not expressly teach when the first controller controls the display driver, the first controller output a first control signal to the second controller, and the second controller puts the three-state output terminal thereof in a high impedance state when the first control signal is received and that when the first controller does not control the display driver, the first controller outputs a second control signal to the second controller and puts the three-state output terminal thereof in a high impedance state, and the second controller controls the display driver when the second control signal is received.

Saegusa also teaches a device (7, input actuation section) designed to transmit the control signals to the two microprocessors based on the input of the user (paragraph 24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the functionality of the input actuation section (7) with the first microprocessor so the output selection signals would be transmitted from it instead of a separate device since it has been held that making integral that which is separate does not in itself make an invention patentable (In re Lockhart, 90 USPQ 214).

In the same field of endeavor (transmitting display data), Masaki teaches the use of a three-state output terminals (11-13) for use where three video signals feed the same output (14, memory). Masaki further teaches that when the first device (8) is outputting the video signal the second (9) and third (10) devices are both driving their three-state outputs at a high impedance state and when the second (9) or third (10) devices are driving their outputs, the other two devices are outputting in the high impedance state (paragraphs 21-24).

Art Unit: 2675

At the time the invention was made it would have been obvious to one of ordinary skill in the art to combine the multiple control system of Saegusa in parallel with the tri-state output method for video signals used in Masaki in order allow the devices to be attached to a common device without the need for extra hardware (in this case eliminating the need for diodes) thereby reducing the construction size of the device (Masaki, paragraph 75).

Neither Saegusa nor Masaki expressly teach a display driver adapted to drive the display unit or that the output terminal is connected via a serial communication line.

In the same field of endeavor (transmitting display data), Shimizu teaches a display driver (3) adapted to drive the display unit (1, LCD Panel) and the output terminal of the controller (7) is connected to the driver (3) via a serial communication line (BUS1, column 4 lines 27-46).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to combine the device multiple control device using tri-state outputs as described above using Saegusa and Masaki with the display driver and serial driving method of Shimizu in order to provide a driving device which can be operated at a high speed (Shimizu, column 2 lines 5-10).

With respect to claim 5, Saegusa teaches a recording and reproducing functional part (cassette tape recorder) adapted to reproduce data stored in a tape storage medium (paragraph 1), a reproducing functional part (CD player) adapted to reproduce data stored in a disc storage medium. The method and medium these devices use to reproduce data is obvious from their given names.

Saegusa does not expressly teach a housing containing the recording and reproducing functional part and the reproducing functional part .

However, Examiner takes Official Notice that placing the components of a combined electronic device into a single housing is well known in the field of electronic devices.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to place the recording and reproducing functional part and the reproducing functional part of Saegusa into a housing in order to protect the components of the device.

Saegusa fails to teach the first microcomputer (3) is adapted to control a recording and reproducing functional part.

Art Unit: 2675

Saegusa does, however, teach the first microcomputer (3) adapted to control an AM/FM radio and further teaches a system containing a recording and reproducing functional part with an AM/FM radio (paragraph 1) and a three-way system containing the AM/FM radio, cassette tape recorder, and CD player (paragraph 28).

It would have been obvious for one of ordinary skill in the art to have the first microcomputer adapted to control the recording and reproducing functional part in order to allow the user to have recording and reproducing functional part and reproducing functional part combined to allow for recording of media played in the reproducing functional part.

Saegusa further states there is a second microcomputer (4) adapted to control the reproducing functional part (CD player, paragraph 4). Saegusa goes on to teach a display unit (8) adapted to display a display data generated by the first microcomputer (3) and the second microcomputer (4, paragraph 14, see drawing 1).

Saegusa does not expressly teach a display driver adapted to drive the display unit, the first microcomputer is serially connected to the display driver with a three-state output terminal, the second microcomputer is serially connected to the display driver with a three-state output terminal, and the first microcomputer and the second microcomputer are connected such that the second microcomputer receives a mode selection signal output from the first microcomputer.

Saegusa also fails to expressly teach when the first microcomputer determines that the recording and reproducing functional part is selected, the first microcomputer outputs the mode selection signal indicating that the recording and reproducing functional part is selected to the second microcomputer so as to put the three-state output terminal in a high impedance state and outputs the display data to the display driver. Saegusa does not expressly teach that when the first microcomputer determines that the reproducing functional part is selected, the microcomputer outputs the mode selection signal indicating that the reproducing functional part is selected to the second microcomputer so as to allow the second microcomputer to output the display data to the display driver, and puts the three-state terminal thereof in a high impedance state.



Saegusa also teaches a device (7, input actuation section) designed to transmit the control signals to the two microprocessors based on the input of the user (paragraph 24). This would allow for the mode selection signals to be transmitted from the first controller.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the functionality of the input actuation section (7) with the first microprocessor so the output selection signals would be transmitted from it instead of a separate device since it has been held that making integral that which is separate does not in itself make an invention patentable (In re Lockhart, 90 USPQ 214).

In the same field of endeavor (transmitting display data), Masaki teaches the use of a three-state output terminals (11-13) for use where three video signals feed the same output (14, memory). Masaki further teaches that when the first device (8) is outputting the video signal the second (9) and third (10) devices are both driving their three-state outputs at a high impedance state and when the second (9) or third (10) devices are driving their outputs, the other two devices are outputting in the high impedance state (paragraphs 21-24).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to combine the multiple control system of Saegusa in parallel with the tri-state output method for video signals used in Masaki in order allow the devices to be attached to a common device without the need for extra hardware (in this case eliminating the need for diodes) thereby reducing the construction size of the device (Masaki, paragraph 75).

Neither Saegusa nor Masaki expressly teach, teach a display driver adapted to drive the display unit, the first microcomputer is serially connected to the display driver, or the second microcomputer is serially connected to the display driver with a three-state output terminal.

In the same field of endeavor (transmitting display data), Shimizu teaches a display driver (3) adapted to drive the display unit (1, LCD Panel) and the output terminal of the controller (7) is connected to the driver (3) via a serial communication line (BUS1, column 4 lines 27-46).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to combine the device multiple control device using tri-state outputs as described above using Saegusa and

Art Unit: 2675

Masaki with the display driver and serial driving method of Shimizu in order to provide a driving device which can be operated at a high speed (Shimizu, column 2 lines 5-10).

With respect to claim 3, all the claim limitations have already been discussed with respect to the rejection of claim 1.

With respect to claim 4, Shimizu further teaches the output terminal of the controller (7) is connected to the driver (3) via a serial communication line (BUS1, column 4 lines 27-46).

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saegusa (Japanese Published App. 05-265389) in view of Masaki (Japanese Published App. 08-088838) and further in view of Shimizu (US Patent No. 5,801,674) as applied to claim 5 above, and further in view of Aramaki (US Patent No. 5,638,346).

With respect to claim 6, Saegusa, Masaki and Shimizu combine to teach the elements of claim 5 as discussed above.

Neither Saegusa, Masaki nor Shimizu expressly teach a remote control signal receiving part adapted to receive an infrared signal from a remote controller and the first microcomputer determines that which of the recording and reproducing functional part and the reproducing part is selected by a user based on the infrared signal received by the remote control signal receiving part.

In the same field of endeavor (electronic device control), Aramaki teaches a remote control signal receiving part (48) adapted to receive infrared signal (infrared ray receiving unit) from a remote controller (90). The infrared signal received by the remote control signal receiving part (48) carries signals to determine the control functions (column 8, lines 40-43).

At the time the invention was made, it would have been obvious for one of ordinary skill in the art to combine the infrared ray receiving unit of Aramaki to connect to the first controller and the overall multiple control system as described in the combination of Saegusa, Masaki and Shimizu in order to all users the ability to control the device from a distance without the need to be within physical distance of the composite electronic device.

Art Unit: 2675

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Japanese Published Application 08-006581 which teaches a composite electronic device with a display and using a remote control device.

Japanese Published Application 09-005364 which teaches a composite electronic device containing a CD, VCR and Television tuner.

Japanese Published Application 08-275286 which teaches a composite electronic device containing a radio a cassette deck.

US Published Application 2002/0168172 which teaches a composite electronic device containing a DVD Player and VCR.

US Published Application 2003/0021586 which teaches a composite electronic device containing a DVD player and television in a single unit.

US Patent No. 5,887,112 which teaches a composite electronic device containing a VCR and television.

US Patent No. 5,796,538 which teaches a composite electronic device containing a multi-deck VCR.

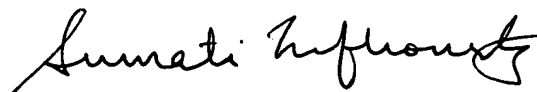
### ***Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Maresca whose telephone number is (571) 272-5517. The examiner can normally be reached on M-TH and alternate Fridays 7:15 am to 4:45 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAM  
J. Maresca  
11/14/2005



**SUMATI LEFKOWITZ  
SUPERVISORY PATENT EXAMINER**